

Title (en)

METHOD FOR REAL-TIME ESTIMATION OF ENGINE COMBUSTION PARAMETERS FROM VIBRATORY SIGNALS

Title (de)

VERFAHREN ZUR ECHTZEITSCHÄTZUNG VON MOTORVERBRENNUNGSPARAMETERN AUS SCHWINGUNGSSIGNALEN

Title (fr)

METHODE D'ESTIMATION EN TEMPS REEL DE PARAMETRES DE COMBUSTION D'UN MOTEUR A PARTIR DE SIGNAUX VIBRATOIRES

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Application

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Abstract (en)

[origin: WO2007101946A1] The invention concerns a method for real time estimation of combustion engine parameters from vibratory signals. It consists in continuously acquiring, from a vibration sensor, and based on a crankshaft angle a vibratory signal representing the vibrations of the engine; real time filtering of said vibratory signal, and estimating in real time the coefficients of the Fourier decomposition of the acquired vibratory signal, by reversing the dynamics of the filter used; finally, from said coefficients, estimating in real time the combustion parameters enabling the combustion to be qualified. The invention is useful for controlling combustion of an internal combustion engine.

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